

City of San Diego Planning & Development Review **Building Development Review** 1222 First Avenue • MS-401 San Diego, CA 92101 (619) 446-5400

Building Newsletter 17-10

Testing and Inspection Requirements for Proof of Compliance

Interpretations of State and Local Building Codes 1998 California Building Code: Chapter 17 Revision Date: July 1999

Page 1 of 2

I. General

- A. Whenever there is insufficient evidence of compliance with any of the provisions of the California Building Code (Building Code), City regulations and ordinances, or evidence that any material or construction does not conform to the requirements of the Building Code, the City of San Diego, Building Official may require tests as proof of compliance to be made at no cost to this jurisdiction (Sec. 104.2.9). This building newsletter describes requirements for submittal of testing proposal documents for review and approval by the Building Official of the City of San Diego.
- B. The Building Official has the authority to order the removal of non-complying work and the replacement of such work in accordance with the approved permitted plans and specifications.
- C. When testing is required to be made as proof of compliance, the following procedure is required to be followed. Each of the required documents are explained in this newsletter and must be submitted in a complete, orderly, clear, legible and concise manner.
 - 1. Letter of Testing Proposal
 - 2. Test, Inspection and Final Reports
 - 3. Letter of Acceptance

II. Conditions Where Testing May Not be Permitted

- A. Testing may not be permitted to prove compliance with the Building Code, governing regulations or to prove soundness where any of the following conditions apply:
 - 1. Where in the opinion of the Building Official, the non-complying condition threatens the life, health, safety or property of the public or its occupants to the extent that it is determined to be unsafe by which it outweighs the need for testing to prove compliance or soundness.
 - 2. Where the non-complying work was performed without a building permit or approval from the City of San Diego, Planning and Development Review Department.
 - 3. When the proposed testing method and procedure is not recognized and accepted by the Building code or the industry standards.
 - 4. Where testing is not allowed by the Building Code, regulations, ordinances or policies.
 - Where the product or assembly is not listed by a recognized and approved listing agency. For additional information refer to Building Newsletter 17-7.

- 6. Where the product or assembly was fabricated in a shop not registered and approved by the City of San Diego, Inspection Services. For additional information refer to Building Newsletter 17-6.
- 7. Where the work was performed without the required special inspection or the special inspection was performed by a special inspector not certified by the City of San Diego, Inspection Services. For further information refer to Building Newsletter 17-6.
- 8. Where the product or assembly is unidentified, unmarked or not labeled.
- 9. Where the source of the product or assembly is unknown.
- 10 . Where the product or assembly was installed in violation of the Building Code and/or the approved listing agency's report.
- 11. Where the original condition of the product or assembly has been altered, modified, changed or revised since it has left the manufacturer's plant or fabricator's shop.
- 12 . Where in the opinion of the Building Official, the workmanship of the non-complying condition is below the minimum standards established by the Building Code and/or the standards recognized by the industry.

III. Letter of Testing Proposal

- A. When testing is required to be made as proof of compliance, the architect/engineer of record responsible for structural design of the project shall submit a letter of testing proposal to Inspection Services for review and approval stating and providing the following:
 - 1. Project address, Plan File number, Permit Number, Date.
 - 2. Description of the work proposed to be tested and/or inspected.
 - 3. Visual inspection.
 - Proposed destructive or non-destructive test method(s).
 - Location of and/or percentage of work proposed to be tested.
 - 6. Reference to details as shown on the approved permitted plans & specifications.
 - Structural calculations showing all design loads and load combinations.
 - 8. Test load, design load, factor of safety and all test load combinations.

- 9. Duration of test load.
- 10. Details and sketches showing location, direction and magnitude of the test load(s) to be applied.
- 11. Details and sketches showing the location of the instrumentations for measurements.
- 12. Description of all failure mode(s)
- 13. Remedies and course of actions for failed tests and/or rejected conditions.
- Testing and inspection agency designated to perform the testing and or inspection.
- 15. Structural observation program.
- State of California Registration stamp of the licensed engineer or architect of record showing expiration date with signature.
- B. Letter of testing proposal along with all supporting documents, specifications, plans, sketches and details shall be submitted to and approved by the Inspection Services Division, Planning and Development Review Department, City of San Diego prior to commencement of testing and/or inspection of proposed work.

IV. Test Methods

A. Recognized and Accepted Test Methods

Test methods and procedures shall be as specified by the Building Code or by other recognized and accepted test standards. Examples of such recognized and accepted standards are test methods specified by the Building Code, or specified by the Building Code Standards or specified by the American Society for Testing and Materials (ASTM) or specified by the International Conference of Building Officials (ICBO). Reference to the Building Code provision or the recognized standards specifying such test method shall be made in the letter of testing proposal. A copy of such test method and procedure shall be included with the "letter of testing proposal".

B. Test Methods Not Recognized

If there are no recognized and accepted test methods for the proposed alternate, the architect or engineer of record responsible for structural design of the project shall provide a comprehensive and complete specification and details outlining the testing procedure. Such proposal shall be supported with substantial evidence, documents and proof of acceptability by the industry. The Building Official shall determine the acceptability of proposed test procedures.

V. Visual Inspection

In addition to testing specified by the architect/engineer of record, all proposed work (100 percent) shall be visually inspected by a special inspector certified by the City of San Diego Building Official for any sign of failure, distress, defect or discrepancy. Findings of such inspection shall be noted in the inspection and test reports.

VI. Structural Observation

The architect/engineer of record, responsible for struc-

tural design of the project, may be required to provide structural observation during set-up of the testing apparatus and instrumentations and during testing operations to assure compliance with the requirements set forth in the "letter of testing proposal" as approved by the City of San Diego. The structural observer shall submit a written structural observation report stating that the site visits have been made, and whether or not the work performed complies with the approved "letter of testing proposal". Building Code Sec. 1702.

VII. Testing Laboratory and Special Inspection Agency

Testing and/or inspection may only be commenced after the "letter of testing proposal" is approved by the Inspection Services. All testing must be performed by construction materials testing laboratories approved by the Inspection Services, City of San Diego in accordance with the approved "letter of testing proposal". All special inspections must be performed by special inspectors certified by the Inspection Services, City of San Diego.

A list of approved construction materials testing laboratories and special inspection agencies is available from Inspection Services. Testing laboratories and special inspection agencies shall notify Inspection Services one business day prior to commencement of testing.

VIII. Test, Inspection and Final Reports

The construction materials testing laboratory and special inspection agency is required to provide a comprehensive and complete report covering the test set-up, testing and inspection procedure and findings. The reports must reference to the 'letter of testing proposal' by date as approved by the City of San Diego Inspection Services and state whether or not procedures were followed in compliance with such document.

Test results, visual inspection and special inspection reports along with the final report shall be submitted in a clear, legible and concise manner.

IX. Letter of Acceptance

All test results and inspection reports must be reviewed and accepted by the architect/engineer of record for compliance with the "letter of testing proposal", plans, specifications as approved by the City of San Diego, Building Code and other governing codes and regulations. The architect/engineer of record shall submit a stamped and signed letter of acceptance, along with a copy of all test and inspection reports and the approved letter of testing proposal to Inspection Services, City of San Diego for approval. Such letter must reference to the approved 'letter of testing proposal' and the test and inspection reports.

X. Further Information and Questions

For additional information you may refer to the City of San Diego, Building Newsletters 17-1, 17-6, 17-7 and 17-8.

For questions regarding special inspections, construction materials testing, structural observation and offsite fabrication of building components you may contact Inspection Services at (858) 492-5070.